Health Impact Assessment

Introduction

How was the Health Impact Assessment addressed in the preferred alternative?

In 2007, Senate Bill 6099 directed that a health impact assessment be prepared for the SR 520 project. To fulfill that legislation, the SR 520 Health Impact Assessment (HIA) was prepared by Public Health - Seattle & King County and the Puget Sound Clean Air Agency with support from WSDOT, and published in September 2008.

The HIA recommends elements for creating healthy communities in the SR 520 corridor, including landscaped lids and green spaces, transit improvements, pedestrian and bicycling amenities, design improvements and noise reduction strategies. The HIA also encourages selection of the project alternative that can most effectively and efficiently incorporate all recommended features into its design.

Specific HIA recommendations include the following four categories:

- Construction period management.
 - o Reduce construction-related pollution.
 - o Increase traffic management.
 - o Provide for construction noise control.
- Transit, bicycling and walking.
 - o Increase and improve transit service to meet increased demand, attract more riders and reduce air pollution.
 - o Install connected walking and bicycling facilities throughout the corridor.
 - o Create a common wayfinding system in the corridor.
 - Provide safe mobility on pedestrian and bicycling paths, and at transit stops and transfer points.
- Landscaped lids and green spaces.
 - Include three landscaped freeway lids (at Interstate 5, 10th Avenue and Delmar Drive East, and Montlake Boulevard).
 - Use landscaping materials throughout the SR 520 corridor, along adjacent rails and roadways and at transit stops.
 - o Improve and preserve the integrity of the Washington Park Arboretum, and the ability of visitors to enjoy it and other green spaces and natural areas.
 - o Preserve access to the waterfront for water related activities.

- Design features.
 - o Reduce noise throughout the corridor.
 - o Add to the adjacent communities' visual character with art and design.
 - Utilize innovative storm water management practices along the SR 520 corridor to reduce vehicular pollution from entering lake Washington.

The preferred alternative for the SR 520 I-5 to Medina project incorporates many of the types of design features recommended by the SR 520 Health Impact Assessment.

What comments were received?

During the SDEIS public comment period, the Seattle City Council commented that the SR 520 project should implement the HIA recommendations.

What issues are we trying to resolve?

Since the beginning of the project in 2000, the SR 520 project has included many of the concepts outlined in the HIA. Most notably, the project has included extensive bicycle and pedestrian facilities, landscaped lids, transit facilities, noise mitigation, and stormwater treatment. In 2010, the west side portion of the project is moving from conceptual design toward final design, including refining the project definition of the preferred alternative for the FEIS. As the project adds design details and definitions, these details should follow the intent of the issues outlined in the HIA.

Addressing the problem

How will we identify possible solutions?

As design of the preferred alternative continues, WSDOT is meeting regularly with the Seattle DOT, King County Metro, Sound Transit, the Arboretum and Botanical Garden Committee (ABGC) and other stakeholders to collectively identify detailed solutions for a number of HIA-related issues. In addition, comments gathered through the EIS process and public outreach activities are evaluated for inclusion in the project.

How will we reach agreement?

The preferred alternative design identified additional or improved solutions for more of the HIA recommendations. New and improved solutions to HIA recommendations continue to be identified and developed as part of ongoing work efforts with the City of Seattle, King County, other agencies and interested stakeholders. Among these efforts are the Technical Coordination Team (TCT) collaboration process, coordination with the ABGC to improve and preserve the integrity of the Arboretum, the NEPA process and compliance with Section 106 of the National Historic Preservation Act.

Recommendation

What did we consider?

WSDOT considered three SDEIS design options and subsequently developed the preferred alternative based on public and agency comments, HIA recommendations, and extensive coordination with various stakeholders.

What are the options presented for TCT consideration?

WSDOT recommends the following features in the preferred alternative to specifically address HIA recommendations. Ongoing design review of the preferred alternative will provide opportunities to add to or refine these features in the future. Current recommendations include:

Transit, bicycling and walking

- New direct-access transit/HOV ramps to/from the east to transit stops on the Montlake lid.
- Transit/HOV lanes on Montlake Boulevard and a second bascule bridge to improve transit mobility between SR 520, the University of Washington, and the U-Link station.
- Creation of space between the west approach bridges and on the floating bridge to accommodate potential future light rail and provide an improved environment for plants and aquatic species.
- Improved connections for pedestrian and bicycle facilities. For example:
 - A new regional bike/pedestrian trail connecting Bellevue to the Burke Gilman trail
 including proposed grade separated crossings over Montlake Boulevard and Pacific
 Place between the Sound Transit UW station and Rainier Vista on the University of
 Washington campus.
 - A new trail east of the Montlake lid directly connecting the Ship Canal Waterside Trail to the Washington Park Arboretum trail system as planned within the Arboretum Master Plan. Improved on-street bike lanes.
- Traffic bulbs and improved pedestrian crossings at key local street intersections, and other
 design features to calm traffic and help provide a safer environment to enhance mobility for
 pedestrians and bicyclists.

Landscaped lids and green spaces

- Landscaped freeway lids at 10th and Delmar and the Montlake Interchange are included in the west side portion of the project (three lids are included in the east portion of the project). Although the I-5 lid has been eliminated, the Montlake lid was expanded is now nearly 1500 feet in length.
- Widened bridge over I-5 at Roanoke Street East with landscaping or other enhancements to separate bike/pedestrian users from I-5.
- Corridor landscaping that will blend with the natural environment, with additional

landscaping on the expanded Montlake lid creating passive-use and open green space reconnecting the existing neighborhood, as well as new urban design features of Lake Washington Boulevard.

Design features

- Use of narrowed lanes and shoulders on SR 520 to reduce the sensitive area impact.
- Narrower Portage Bay Bridge including a managed shoulder for traffic use during peak traffic periods.
- Removal of existing Lake Washington Boulevard ramps, improving the area's visual quality and restoring native wetlands.
- Reduced height of the floating bridge to minimize visual effects to neighborhoods.
- A strong commitment to use innovative noise reduction strategies, in addition to following the standard FHWA/WSDOT process for consideration of noise mitigation. The preferred alternative now includes:
 - Four-foot traffic barriers with absorptive material from I-5 to the west approach of the floating bridge.
 - Quieter concrete pavement surface treatments along the SR 520 mainline the full length of the project, including the floating bridge.
 - o Acoustically absorptive materials around the Montlake lid portals.
 - o Bridge expansion joint encapsulation.
 - Speed limit reduction on the Portage Bay Bridge.
- Use of 'natural setting', green-build and low impact development stormwater ponds, and a commitment to innovative stormwater management strategies, especially on the floating bridge.
- Close coordination with the Arboretum and Botanical Garden Committee to develop plans for traffic calming and overall traffic management within the Arboretum, while ensuring visitors can continue to access and enjoy the Arboretum.

Final TCT recommendation

The TCT supports addressing recommendations from the 2008 HIA by incorporating design features identified in the preferred alternative, including enhancing transit, bicycling, and walking facilities; providing landscaped lids and green spaces; and employing noise reduction strategies.